

**How large could a print be?
Methods estimate this for a digital photo.**

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Introduction: Six questions are addressed

- **How much detail can a person see?**
- **How much detail can a printer show?**
- **How much detail is expressed in an image?**
- **How much detail can a camera and lens represent?**
- **How large are the smallest objects in nature?**
- **How large can the print be and still look good to most viewers?**

Conclusions

- Most people can see details about **0.2 mm wide**.
- Many printers can show details about **0.05 mm**. Thus, the printer does not impose a limitation.
- The best images show meaningful detail in a **single pixel**, so the total detail is determined by **sensor size**.
- The best lenses on good cameras are capable of yielding images with single pixel resolution.
- The smallest objects in most photos of natural subjects range from **0.01 to 0.04 mm**. People generally cannot see these fine details unless they are magnified.
- Print size can be **pixel width x 0.2mm** when each pixel shows meaningful detail. For a sensor with 5000 pixels horizontally, this will be about **1 metre or 40" wide**.